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| APPLICATION NO.            | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|----------------------------|-------------|----------------------|-------------------------|------------------|
| 10/647,698                 | 08/25/2003  | Tommy E. White       | GP-302475               | 2469             |
| 7590                       | 03/22/2005  |                      | EXAMINER                |                  |
| KATHRYN A. MARRA           |             |                      | GUTMAN, HILARY L        |                  |
| General Motors Corporation |             |                      | ART UNIT                | PAPER NUMBER     |
| Mail Code 482-C23-B21      |             |                      | 3612                    |                  |
| P.O. Box 300               |             |                      |                         |                  |
| Detroit, MI 48265-3000     |             |                      | DATE MAILED: 03/22/2005 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                           |                  |  |
|------------------------------|---------------------------|------------------|--|
| <b>Office Action Summary</b> | Application No.           | Applicant(s)     |  |
|                              | 10/647,698                | WHITE ET AL.     |  |
|                              | Examiner<br>Hilary Gutman | Art Unit<br>3612 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 31 January 2005.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,4-13 and 15-21 is/are pending in the application.

4a) Of the above claim(s) 17-20 is/are withdrawn from consideration.

5) Claim(s) 12,13,15 and 16 is/are allowed.

6) Claim(s) 1,4-11 and 21 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 25 August 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the body panel forming a first portion of the vehicle exterior surface of claim 1, the metal bumper forming a second portion of the vehicle exterior surface of claim 1, and the first and second portions being contiguous of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Claim Objections*

2. Claim 4 is objected to because of the following informalities: on line 4, “a load” should be “the load” to refer back to claim 1, line 5. Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Eipper et al. Eipper et al. (6,224,120) disclose a vehicle comprising: a frame including at least one structural frame member; and a metal bumper mounted with respect to the at least one structural frame member for receiving a load in the event of an impact to a portion of the vehicle periphery; wherein at least a portion of the bumper is characterized by a curvature.

With regard to claim 4, the at least one structural frame member includes two lower rails and two upper rails, and wherein the bumper is operatively connected to the two lower rails and the two upper rails such that an impact load received by the bumper in the event of a vehicle impact is at least partially distributed to the two lower rails and the two upper rails.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 1 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Pedersen.

Wang (5,967,673) discloses the claimed invention but fails to specify disclose the specifics of the bumper including the material of the bumper being metal.

Pedersen (5,997,058) teaches a vehicle comprising: a frame (Figures 1 and 8) including at least one structural frame member; and a metal bumper 1 mounted with respect to the at least one structural frame member for receiving a load in the event of an impact to a portion of the vehicle periphery; wherein at least a portion of the bumper is characterized by a curvature.

With regard to claim 8, the bumper includes an inner panel (Figures 4-6) and an outer panel operatively connected to the inner panel such that the inner panel and the outer panel define a cavity therebetween.

With regard to claim 9, the inner panel is characterized by strengthening formations such as 4c (Figure 6).

With regard to claim 10, the inner panel or the outer panel can be formed using a sheet hydroforming process.

With regard to claim 11, the bumper includes an integral tab defining a hole (Figure 3) for the attachment of vehicle hardware such as the frame.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the bumper of Pedersen in place of the bumper of Wang in order to obtain desirable characteristics of the metal Pedersen bumper.

With regards to claim 10, the recitation that the inner and outer panel are formed by specific processes is a process limitation. It should be noted that the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113).

8. Claims 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Eipper et al. in view of Tohda et al.

With regard to claim 6, Eipper et al. disclose the bumper including an upper bumper bar portion, a lower bumper bar portion, and portion (Figure 5) interconnecting the upper bumper bar portion and the lower bumper bar portion.

With regard to claim 7, the inner and outer panel each at least partially define the upper bumper bar portion, the lower bumper bar portion, and the portion interconnecting the upper bumper bar portion and the lower bumper bar portion.

Eipper et al. lack the bumper including an inner panel and an outer panel operatively connected to the inner panel.

Tohda et al. (6,447,049) teach a vehicle comprising: a frame including at least one structural frame member 18; and a metal bumper 20, 25 mounted with respect to the at least one structural frame member for receiving a load in the event of an impact to a portion of the vehicle periphery; wherein at least a portion of the bumper is characterized by a curvature.

With regard to claim 4, the at least one structural frame member (Figure 2) includes two lower rails 26 and two upper rails 19, and wherein the bumper is operatively connected to the two lower rails and the two upper rails such that an impact load received by the bumper in the event of a vehicle impact is at least partially distributed to the two lower rails and the two upper rails.

With regard to claim 5, the bumper includes an inner panel 22, 28 (Figure 3) and an outer panel operatively connected to the inner panel.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided inner and outer panels as taught by Tohda et al. in place of the rod profile of Eipper et al. in order to provide an interior cavity for a filling material if so desired.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. in view of Sundgren.

Eipper et al. (6,224,120) disclose a vehicle comprising: two upper rails 38, 40 and two lower rails 39, 41; and a metal bumper 12 mounted with respect to the two upper rails and the two lower rails for receiving a load in the event of an impact to the periphery of the vehicle, the

bumper having an outer panel and an inner panel operatively connected to the outer panel (as is known from rod-shaped or U-shaped profiles); wherein the inner panel and the outer panel are characterized by a curvature.

Eipper et al. lack the inner panel being at least partially corrugated.

Sundgren et al. (6,726,258) teach corrugations 6 on an inner panel of a bumper.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided corrugations as taught by Sundgren et al. upon the inner panel of Eipper et al. in order to allow the bumper to spread as well as absorb the energy of a collision object.

***Allowable Subject Matter***

10. Claims 12-13 and 15-16 are allowed.

***Response to Arguments***

11. Applicant's arguments with respect to claims 1 and 4-11 have been considered but are moot in view of the new ground(s) of rejection.

However, with respect to claim 21, Applicant's arguments filed 1/31/05 have been fully considered but they are not persuasive. Applicant argues that Eipper et al. must necessarily present the features the examiner inherently relied upon in the rejection. Therefore the examiner notes that the Eipper et al. reference clearly discloses inner and outer panels (as best seen in cross section in Figure 6). The bumper has a "rod" profile and is rod shaped in cross section thereby providing for both inner and outer panels. The inner panel is operatively connected to the outer panel thereby forming the rod profile and the inner and outer panels characterized by a curvature.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Gutman whose telephone number is 703-305-0496.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 703-308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**15. Any response to this final action should be mailed to:**

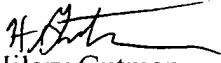
Box AF  
Assistant Commissioner for Patents  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9327, (for formal communications; please mark "EXPEDITED PROCEDURE")

**or:**

(703) 746-3515, (for informal or draft communications, please clearly label "PROPOSED" or "DRAFT").

  
Hilary Gutman  
March 16, 2005